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Remarks

In view of the following discussion, the applicants submit that the claims now pending in the application are neither anticipated under the provisions of 35 U. S. C. § 102, or obvious under the provisions of 35 U. S. C. § 103. Thus, the applicants believe that all of these claims are in allowable form.

OBJECTIONS

A. Drawings

The Examiner objects to the drawings under 37 C. F. R. § 1.83(a). In particular, the Examiner indicates that the drawings must show every feature of the invention specified in the claims. With respect to claims 2, the Examiner states that "the depth of the cavities being greater than or equal to one third of the height of the barrier ribs" must be shown in the drawings. Applicants submit that the features of claim 2 are the "cavities" and the "ribs" which are clearly illustrated in FIGS. 5-6 as cavities 51, 52 and ribs 2.

With respect to claim 3, the Examiner states that "the maximum width of the cavities is greater than or equal to 50 μm " must be shown in the drawings. Applicants submit that the feature of claim 3 is the cavities which are clearly illustrated in FIGS. 5-6 as cavities 51, 52.

With respect to claim 4, the Examiner states that "the width of the cavities is greater than or equal to twice the width of the notches" must be shown in the drawings. Applicants submit that the features of claim 4 are the "cavities" and the "notches" which are clearly illustrated in FIGS. 5-6 as cavities 51, 52 and notches 4.

With respect to claim 5, the Examiner states that "the barrier ribs having a porosity that is greater than or equal to 25 % and in that the width of the notches is less than 60 μm " must be shown in the drawings. Applicants submit that the

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features of claim 5 are the "ribs" and the "notches" which are clearly illustrated in FIGS. 5-6 as ribs 2 and notches 4.

With respect to claim 6, the Examiner states that "the height of the barrier ribs is greater or equal to 120 μm " must be shown in the drawings. Applicants submit that the feature of claim 6 is the "ribs" which are clearly illustrated in FIGS. 5-6 as ribs 2.

As such, the drawings show every feature of the invention specified in the claims. Therefore, it is respectfully requested that the Examiner's objection to the drawings be withdrawn.

REJECTIONS

A. 35 U. S. C. 102

1. Claims 1-2 are not anticipated by Kang

Claims 1-2 stand rejected under 35 U. S. C. § 102(b) as being anticipated by Kang (U. S. Patent 6,841,928 B2 issued January 11, 2005). The applicants submit that these claims are not anticipated by this reference.

Claim 1 is directed to a plasma panel (see, specification at page 1, line 5). The plasma panel comprises two plates having a sealed space therebetween that is filled with discharge gas and is divided into discharge cells distributed in rows and columns (see, specification at page 1, lines 12-18). The discharge cells are bounded between these plates by barrier ribs forming an array (see, specification at page 1, lines 7-8). The barrier rib portion that separates any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity (see, FIGS. 5-6 and the specification at page 7, lines 2-8).

Kang describes a plasma display device (see, Kang at column 1, lines 15-18). The plasma display device 10 includes a partition structure 20

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discontinuously formed parallel to the address electrodes 12 (see, Kang at FIGS. 1-2 and column 3, lines 19-22). In plasma display devices, the address electrodes are parallel with the columns of cells.

Kang does not describe or suggest a plasma panel having discharge cells that are bounded by barrier ribs forming an array where the barrier rib portion separating any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity. Rather, Kang teaches a completely different arrangement in which a partition structure is discontinuously formed parallel to the address electrodes that are parallel with the columns of cells such that there is no barrier between adjacent cells of the same column. Since Kang does not describe or suggest a plasma panel having discharge cells that are bounded by barrier ribs forming an array where the barrier rib portion separating any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity, claim 1 is patentable over Kang.

Claim 2 depends directly from claim 1. For the same reasons as stated above for claim 1, claim 2 is also patentable over Kang.

B. 35 U. S. C. § 103

1. Claims 3-4 are not obvious over Kang

Claims 3-4 stand rejected under 35 U. S. C. § 103(a) as being obvious over Kang (U. S. Patent 6,841,928 B2 issued January 11, 2005). The applicants submit that these claims are not rendered obvious by this reference.

Claim 3 depends from claim 1 and is directed to a plasma panel (see, specification at page 1, line 5). The plasma panel comprises two plates having a sealed space therebetween that is filled with discharge gas and is divided into discharge cells distributed in rows and columns (see, specification at page 1,

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lines 12-18). The discharge cells are bounded between these plates by barrier ribs forming an array (see, specification at page 1, lines 7-8). The barrier rib portion that separates any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity (see, FIGS. 5-6 and the specification at page 7, lines 2-8).

Kang describes a plasma display device (see, Kang at column 1, lines 15-18). The plasma display device 10 includes a partition structure 20 discontinuously formed parallel to the address electrodes 12 (see, Kang at FIGS. 1-2 and column 3, lines 19-22). In plasma display devices, the address electrodes are parallel with the columns of cells.

Kang does not describe or suggest a plasma panel having discharge cells that are bounded by barrier ribs forming an array where the barrier rib portion separating any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity. Rather, Kang teaches a completely different arrangement in which a partition structure is discontinuously formed parallel to the address electrodes that are parallel with the columns of cells such that there is no barrier between adjacent cells of the same column. Since Kang does not describe or suggest a plasma panel having discharge cells that are bounded by barrier ribs forming an array where the barrier rib portion separating any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity, claim 3 is patentable over Kang.

Claim 4 also depends from claim 1. For the same reasons as stated above with regard to claim 1, claim 4 is also patentable over Kang.

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2. Claim 5 is not obvious over Kang in view of Bettinelli et al.

Claim 5 stands rejected under 35 U. S. C. § 103(a) as being obvious over Kang (U. S. Patent 6,841,928 B2 issued January 11, 2005) in view of Bettinelli et al. (WO 02/05602 published July 4, 2002). The applicants submit that these claims are not rendered obvious by the combination of these references.

Claim 5 depends from claim 1 and is directed to a plasma panel (see, specification at page 1, line 5). The plasma panel comprises two plates having a sealed space therebetween that is filled with discharge gas and is divided into discharge cells distributed in rows and columns (see, specification at page 1, lines 12-18). The discharge cells are bounded between these plates by barrier ribs forming an array (see, specification at page 1, lines 7-8). The barrier rib portion that separates any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity (see, FIGS. 5-6 and the specification at page 7, lines 2-8).

Kang describes a plasma display device (see, Kang at column 1, lines 15-18). The plasma display device 10 includes a partition structure 20 discontinuously formed parallel to the address electrodes 12 (see, Kang at FIGS. 1-2 and column 3, lines 19-22). In plasma display devices, the address electrodes are parallel with the columns of cells.

Kang does not describe or suggest a plasma panel having discharge cells that are bounded by barrier ribs forming an array where the barrier rib portion separating any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity. Rather, Kang teaches a completely different arrangement in which a partition structure is discontinuously formed parallel to the address electrodes that are parallel with the columns of cells such that there is no barrier between adjacent cells of the same column. Since Kang does not describe or suggest a plasma panel having discharge cells that are bounded by

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barrier ribs forming an array where the barrier rib portion separating any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity, claim 5 is patentable over Kang.

Bettinelli et al. describes a process for manufacturing barriers intended to separate discharge cells of a plasma display panel (see, Bettinelli et al. at page 1, lines 5-8).

Bettinelli et al. does not describe or suggest a plasma panel having discharge cells that are bounded by barrier ribs forming an array where the barrier rib portion separating any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity. Rather, Bettinelli et al. only teaches a method of manufacturing barriers for a plasma display panel. Since Bettinelli et al. does not describe or suggest a plasma panel having discharge cells that are bounded by barrier ribs forming an array where the barrier rib portion separating any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity, claim 5 is patentable over Bettinelli et al.

Furthermore, since Kang only teaches a discontinuously formed partition structure that is parallel to the address electrodes and with the columns of cells such that there is no barrier between adjacent cells of the same column, and Bettinelli et al. only teaches a method of manufacturing barriers for a plasma display panel, the combination of these references does not describe or suggest applicant's arrangement recited in claim 5. In particular, claim 5 describes a plasma panel having discharge cells that are bounded by barrier ribs forming an array where the barrier rib portion separating any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity. Thus, claim 5 is patentable over the combination of these references.

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3. Claim 6 is not obvious over Kang in view of Awamoto et al.

Claim 6 stands rejected under 35 U. S. C. § 103(a) as being obvious over Kang (U. S. Patent 6,841,928 B2 issued January 11, 2005) in view of Awamoto et al. (U. S. Patent 6,768,485 B2 issued July 27, 2004). The applicants submit that these claims are not rendered obvious by the combination of these references.

Claim 8 depends from claim 1 and is directed to a plasma panel (see, specification at page 1, line 5). The plasma panel comprises two plates having a sealed space therebetween that is filled with discharge gas and is divided into discharge cells distributed in rows and columns (see, specification at page 1, lines 12-18). The discharge cells are bounded between these plates by barrier ribs forming an array (see, specification at page 1, lines 7-8). The barrier rib portion that separates any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity (see, FIGS. 5-6 and the specification at page 7, lines 2-8).

Kang describes a plasma display device (see, Kang at column 1, lines 15-18). The plasma display device 10 includes a partition structure 20 discontinuously formed parallel to the address electrodes 12 (see, Kang at FIGS. 1-2 and column 3, lines 19-22). In plasma display devices, the address electrodes are parallel with the columns of cells.

Kang does not describe or suggest a plasma panel having discharge cells that are bounded by barrier ribs forming an array where the barrier rib portion separating any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity. Rather, Kang teaches a completely different arrangement in which a partition structure is discontinuously formed parallel to the address electrodes that are parallel with the columns of cells such that there is no barrier between adjacent cells of the same column. Since Kang does not

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describe or suggest a plasma panel having discharge cells that are bounded by barrier ribs forming an array where the barrier rib portion separating any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity, claim 6 is patentable over Kang.

Awamoto et al. describes a plasma display panel (*see*, Awamoto et al. at column 1, lines 6-8). The plasma display panel 1 includes meandering partitions 29 having a height of about 150 microns disposed between address electrodes (*see*, Awamoto et al. at FIG. 2 and column 4, lines 5-8).

Awamoto et al. does not describe or suggest a plasma panel having discharge cells that are bounded by barrier ribs forming an array where the barrier rib portion separating any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity. Rather, Awamoto et al. only describes a plasma display panel including meandering partitions having a height of about 150 microns disposed between address electrodes. Since Awamoto et al. does not describe or suggest a plasma panel having discharge cells that are bounded by barrier ribs forming an array where the barrier rib portion separating any two adjacent cells of the same column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity, claim 6 is patentable over Awamoto et al.

Furthermore, since Kang only teaches a discontinuously formed partition structure that is parallel to the address electrodes and with the columns of cells such that there is no barrier between adjacent cells of the same column, and Awamoto et al. only describes a plasma display panel including meandering partitions having a height of about 150 microns disposed between address electrodes, the combination of these references does not describe or suggest applicant's arrangement recited in claim 6. In particular, claim 6 describes a plasma panel having discharge cells that are bounded by barrier ribs forming an array where the barrier rib portion separating any two adjacent cells of the same

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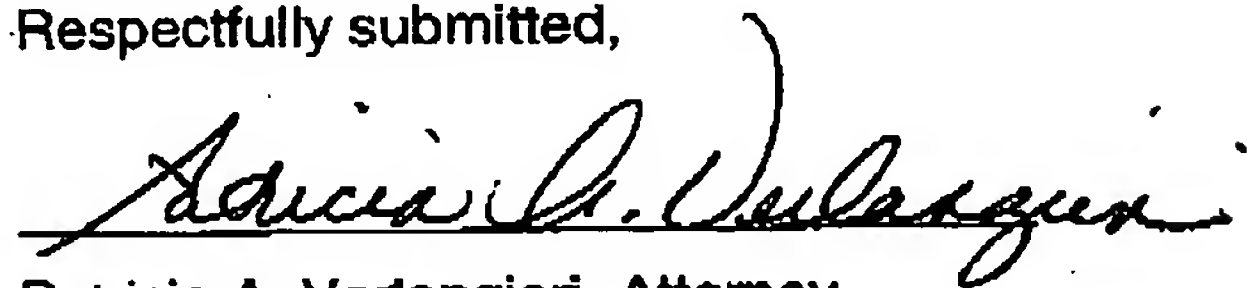
column includes a cavity in the thickness of the rib as well as a notch that brings the two adjacent cells in contact with each other through the cavity. Thus, claim 6 is patentable over the combination of these references.

CONCLUSION

Thus, the applicants submit that none of the claims presently in the application are anticipated under the provisions of 35 U. S. C. § 102, or obvious under the provisions of 35 U. S. C. § 103. Consequently, the applicants believe that all of the claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Ms. Patricia A. Verlangieri, at (609) 734-6867, so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,



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